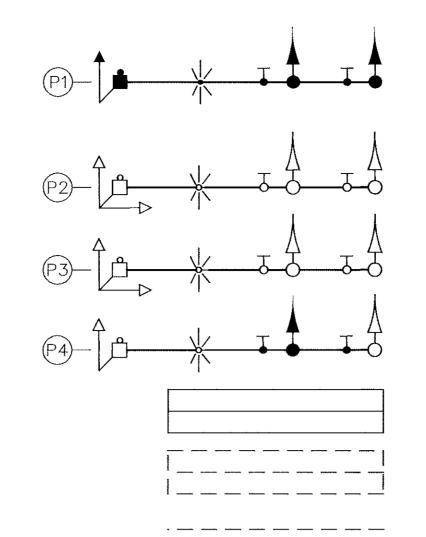


ELECTRICAL CONDUIT LAYOUT WITH WIRING

- Proposed Power Feed Cable 3-Wire (No. 4 AWG)
- 2-Conductor Cable (Aluminum Shielded)
- 2-Conductor Tray Cable (No. 12 AWG)
- 2-Conductor Electrical Cable (No. 14 AWG)
- 3-Conductor Electrical Cable (No. 14 AWG)
- 5-Conductor Electrical Cable (No. 14 AWG)
- 7-Conductor Electrical Cable (No. 14 AWG)
- Bare copper ground wire (No. 6 AWG)
- Loop Detector Wire (No. 14 AWG) in Flexible Tubing
- Empty conduit
- Splice Existing Loop Wire to New Aluminum Shielded Cable



City of Frederick spec. 30 ft. tall traffic signal mast arm pole with 45 ft. mast arm (Red oxide prime coated with Spaulding CVII-400-HPS-FG-Type III-240 volt), one 4-section traffic signal head (mast arm mount), one 3-section traffic signal head (mast arm mount), one R3-6(L) sign (mast arm mount), one R3-6(R) (mast arm mount) sign, one 2-section pedestrian signal head (side of pole mount), one R10-4 pedestrian crossing sign (side of pole mount), and one pedestrian pushbutton (side of pole mount).

Existing pole. All existing signal equipment to be rewired to MD-SHA specifications.

Existing pole.

Existing pole. Existing 3-section signal head to be replaced with 5-section signal head and rewired to MD-SHA specifications.

Proposed 6'x 30'long quadrapole (3-6-3 turns) roadway loop detector.

Existing 6'x 30'long quadrapole (2-4-2 turns) roadway loop detector.

Denotes P.V.C. Schedule 40 conduits with quantity and size of

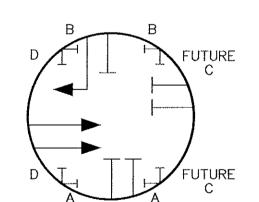
Existing Eagle *NC100 series 8 phase fully actuated traffic signal controller with cabinet.

Proposed 18" x 24" x 24" deep City of Frederick junction box.

Existing 18" x 24" x 24" deep City of Frederick junction box.

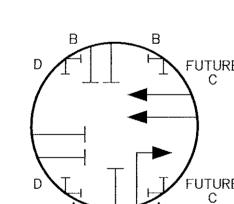


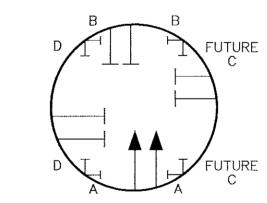
PHASING

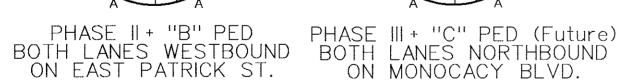


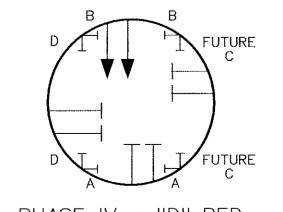
BOTH LANES EASTBOUND

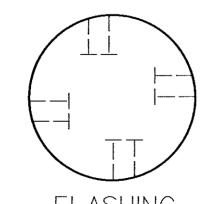
ON EAST PATRICK ST.















This Is A Fully Vehicle Actuated 4 Phase System.

SIGNAL CHART													
SIGNALS PHASE	1	2	3	4	5	6	7	8	PED A PHASE 10,11	PED B PHASE 9,12	PED C PHASE	PED D PHASE 13,14	FLOW SHOWING PED MOVEMENT
1	G → G	G	R	R	R	R	R	R G - ►	STEADY WALK	DW	Ð W	DW	
2	R	R	G G	G	R	R G →	R	R	DW	STEADY WALK	DW	DW	
3	R	R	R	R	G ∢ G	G	R	R	DW	DW	STEADY WALK	DW	FUTURE CROSSING
4	R	R	R	R	R	R	G ∢ G	G	DW	DW	ÐW	STEADY WALK	
FLASHING OPERATION	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	↓ † <u></u> ↓ + ↓ ↓ →
NOTE:	-										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

- 1. All signal poles, pedestrian poles, transformer bases, mounting hardware, junction box frame and covers, traffic controller cabinet, meter cabinet, conduit installed beside controller cabinet, signal heads, and pedestrian heads shall be painted with two (2) finish coats of Benjamin Moore paint *163-60. SPECIAL NOTE: All undersides of signal and pedestrian head visors shall remain dull black finish.
- 2. All roadway crossings, sidewalk, and grass areas shall be repaired as per City of Frederick specifications at no additional cost to the City. In the event that construction causes damage to other areas not noted above the Contractor shall repair all such damaged or disturbed areas to the City standards at no additional cost to the City.
- 3. Existing utilities shown on plan are located according to best available information, however, Contractor is to call Miss Utility 800-257-7777 and City of Frederick offices so that all existing utilities are field located before any excavation takes place.
- 4. Take down existing signal pole (in SE guadrant), fixture mounting arm, fixture, wiring, etc. after job is completed. Install same type of equipment on proposed traffic signal mast arm pole (*P1) with fixture arm hanging out over East Patrick St. Jack hammer old signal pole base 15 in. below finish grade and cut off anchor bolts.
- 5. Install all intersection street lighting on a 6 ft. arm brace.
- 6. All wiring shall be according MD-SHA standards.
- 7. Contractors shall obtain all City of Frederick/MD-SHA specifications and standard details, including roadway crossings, before bidding.
- 8. All materials shall be bid as per City of Frederick/MD-SHA Specifications or City Engineer approved equal.
- 9. Successful contractor shall submit 7 copies of materials to City Engineer for approval before ordering.

REVISIONS

| BY | DATE

10. All work to be done in a professional manner.



The Traffic Group, Inc. Suite 600 40 W. Chesapeake Avenue Towson, Maryland 21204 410-583-8405 1-800-583-8411 Fax 410-321-8458 Job No. 971115 SIGPLAN.DGN

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Between All Phases There Shall Be A Red Clearence.

	REVISIONS	MD-SHA APPROVALS
WHITE OF MARK		
STATE OF THE STATE		ASST. DIVISION CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
		CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
SIGNAL ENGINEERS		ASST. DISTRICT ENGINEER - TRAFFIC
ENGINEER'S SEAL		DIRECTOR, OFFICE OF TRAFFIC & SAFET

APPROVED FOR CONSTRUCTION CITY OF FREDERICK, MARYLAND

DATE

OFFIC OF THE CITY ENGINEER

CITY OF FREDERICK **INTERSECTION PLAN** EAST PATRICK STREET

MONOCACY BOULEVARD TRAFFIC CONTROL

DWG. BY: J.E.S. SCALE: N.T.S.

DATE: <u>04-02-98</u> SHEET 2 OF 2